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inasmuch as these paragraphs do not discuss potential errors in the Beacon application requiring amendment. Rather, paragraphs 14 and 15 in the HDO discuss defects in the application that require amendment. These defects involve discrepancies in the effective radiated power and antenna heights listed in the application. The subject amendment corrects the discrepancies on the effective radiated power and demonstrates that the information requested in paragraph 15 in the HDO has previously been supplied correctly in the application.

3. Paragraph 17 in the HDO indicates that Beacon has failed to address the matter of how it proposes to resolve any RF exposure to workers on its proposed tower. As the attached engineering amendment indicates, Beacon did in fact address this matter in its application. It is believed by Beacon that its original showing in this regard fully complied with the Commission's policies for

Respectfully submitted,

BEACON BROADCASTING CORPORATION

By: 

Jeffrey D. Southmayd,  
Michael R. Miller  
Its Attorneys

SOUTHMAYD & MILLER  
1233 20th Street, N.W.  
Suite 205  
Washington, D.C. 20036  
(202) 331-4100

April 8, 1993

CERTIFICATE OF AMENDMENT

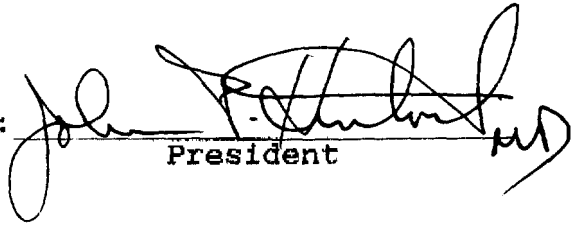
RE: FCC File BPED-900905ML

Beacon Broadcasting Corporation hereby amends its above-referenced application to include an engineering amendment responsive to the Hearing Designation Order in MM Docket No. 93-37.

Beacon Broadcasting Corporation

Date: April 8, 1993

By:

  
President

CORRECTED  
Section V-B - FM BROADCAST ENGINEERING DATA

FOR COMMISSION USE ONLY

File No.

ASB Referral Date

Referred by

**ORIGINAL  
RECEIVED**

Name of Applicant

BEACON BROADCASTING CORPORATION

APR 8 - 1993

Call letters *if issued*

NEW

Is this application being filed in response to **FEDERAL COMMUNICATIONS COMMISSION** Yes ☐ No ☒

If Yes, specify closing date: N/A

OFFICE OF THE SECRETARY

Purpose of Application: *(check appropriate boxes)*

☒ Construct a new (main) facility

☐ Construct a new auxiliary facility

☐ Modify existing construction permit for main facility

☐ Modify existing construction permit for auxiliary facility

☐ Modify licensed main facility

☐ Modify licensed auxiliary facility

If purpose is to modify, indicate below the nature of change(s) and specify the file number(s) of the authorizations affected.

☐ Antenna supporting-structure height

☒ Effective radiated power

☐ Antenna height above average terrain

☐ Frequency

☐ Antenna location

☐ Class

☐ Main Studio location

☒ Other *(Summarize briefly)* Change antenna pattern and polarization; Amend application

File Number(s) BPED-900905ML

1. Allocation:

Channel No.	Principal community to be served:		
	City	County	State
207	ALLENTOWN	LEHIGH	PA

Class *(check only one box below)*

☒ A ☐ B1 ☐ B ☐ C3

☐ C2 ☐ C1 ☐ C ☐ D

2. Exact location of antenna.

(a) Specify address, city, county and state. If no address, specify distance and bearing relative to the nearest town or landmark.

(b) Geographical coordinates (to nearest second). If mounted on element of an AM array, specify coordinates of center of array. Otherwise, specify tower location. Specify South Latitude or East Longitude where applicable; otherwise, North Latitude or West Longitude will be presumed.

Latitude	40°	33'	54"	Longitude	75°	26'	26"
----------	-----	-----	-----	-----------	-----	-----	-----

3. Is the supporting structure the same as that of another station(s) or proposed in another pending application(s)?

☒ Yes ☐ No

If Yes, give call letter(s) or file number(s) or both.

WFMZ TV, license Ch. 69 and WFMZ FM

If proposal involves a change in height of an existing structure, specify existing height above ground level including antenna, all other appurtenances, and lighting, if any.

No changes to the WFMZ-TV tower

CORRECTED

4. Does the application propose to correct previous site coordinates?

☐ Yes ☒ No

If Yes, list old coordinates.

Latitude	°	'	"	Longitude	°	'	"
		N/A				N/A	

5. Has the FAA been notified of the proposed construction?

☐ Yes ☒ No

If Yes, give date and office where notice was filed and attach as an Exhibit a copy of FAA determination, if available.

Exhibit No.  
N/ADate N/A Office where filed N/A

6. List all landing areas within 8 km of antenna site. Specify distance and bearing from structure to nearest point of the nearest runway.

	Landing Area	Distance (km)	Bearing (degrees True)
(a)	Allentown Queen City	3.20	279°
(b)			

7. (a) Elevation: *(to the nearest meter)*(1) of site above mean sea level; 283.4 meters(2) of the top of supporting structure above ground (including antenna, all other appurtenances, and lighting, if any); and 203.6 meters(3) of the top of supporting structure above mean sea level: [(aX1) + (aX2)] 487.0 meters(b) Height of radiation center: *(to the nearest meter)* H = Horizontal; V = Vertical(1) above ground N/A meters (H)113.0 meters (V)(2) above mean sea level: [(aX1) + (bX1)] N/A meters (H)396.4 meters (V)(3) above average terrain N/A meters (H)244.8 meters (V)

8. Attach as an Exhibit sketch(es) of the supporting structure, labelling all elevations required in Question 7 above, except item 7(bX3). If mounted on an AM directional-array element, specify heights and orientations of all array towers, as well as location of FM radiator.

Exhibit No.  
VB-1

9. Effective Radiated Power:

(a) ERP in the horizontal plane N/A kw (HM) 0.125 kw (VM)

(b) Is beam tilt proposed?

☐ Yes ☒ No

If Yes, specify maximum ERP in the plane of the tilted beam, and attach as an Exhibit a vertical elevational plot of radiated field.

N/A kw (HM) N/A kw (VM)Exhibit No.  
N/A

\*Polarization

CORRECTED

10. Is a directional antenna proposed?

☒ Yes ☐ No

If Yes, attach as an Exhibit a statement with all data specified in 47 C.F.R. Section 73.316, including plot(s) and tabulations of horizontally and vertically polarized radiated components in terms of relative field.

Exhibit No.  
VB-7

11. Will the main studio be located within the 70 dBu or 3.16 mV/m contour?

☒ Yes ☐ No

If No, attach as an Exhibit justification pursuant to 47 C.F.R. Section 73.1125.

Exhibit No.  
N/A

12. Are there: (a) within 60 meters of the proposed antenna, any proposed or authorized FM or TV transmitters, or any nonbroadcast *except citizens band or amateur* radio stations; or (b) within the blanketing contour, any established commercial or government receiving stations, cable head-end facilities, or populated areas; or (c) within ten (10) kilometers of the proposed antenna, any proposed or authorized FM or TV transmitters which may produce receiver-induced intermodulation interference?

☒ Yes ☐ No

If Yes, attach as an Exhibit a description of any expected, undesired effects of operations and remedial steps to be pursued if necessary, and a statement accepting full responsibility for the elimination of any objectionable interference (including that caused by receiver-induced or other types of modulation) to facilities in existence or authorized or to radio receivers in use prior to grant of this application. (See 47 C.F.R. Sections 73.315(b), 73.316(d) and 73.318.)

Exhibit No.  
VB-2

13. Attach as an Exhibit a 7.5 minute series U.S. Geological Survey topographic quadrangle map that shows clearly, legibly, and accurately, the location of the proposed transmitting antenna. This map must comply with the requirements set forth in Instruction D for Section V. Further, the map must clearly and legibly display the original printed contour lines and data as well as latitude and longitude markings, and must bear a scale of distance in kilometers.

Exhibit No.  
VB-3

14. Attach as an Exhibit *(name the source)* a map which shows clearly, legibly, and accurately, and with the original printed latitude and longitude markings and a scale of distance in kilometers:

Exhibit No.  
VB-4

(a) the proposed transmitter location, and the radials along with profile graphs have been prepared;

(b) the 1 mV/m predicted contour and, for noncommercial educational applicants applying on a commercial channel, the 3.16 mV/m contour; and

(c) the legal boundaries of the principal community to be served.

15. Specify area in square kilometers (1 sq. mi. = 2.59 sq. km.) and population (latest census) within the predicted 1 mV/m contour.

Area 494 sq. km.Population 286,093

16. Attach as an Exhibit a map *(Sectional Aeronautical charts where obtainable)* showing the present and proposed 1 mV/m (60 dbu) contours.

Exhibit No.  
VB-3

Enter the following from Exhibit above:

Gain Area 0 sq. mi.Loss Area 143 sq. mi. (370 sq km)Percent change (gain area plus loss area as percentage of present area) 42.8 %.

If 50% or more this constitutes a major change. Indicate in question 2(c), Section I, accordingly.

17. For an application involving an auxiliary facility only, attach as an Exhibit a map (*Sectional Aeronautical Chart or equivalent*) that shows clearly, legibly, and accurately, and with latitude and longitude markings and a scale of distance in kilometers:

Exhibit No.  
N/A

(a) the proposed auxiliary 1 mV/m contour; and

(b) the 1 mV/m contour of the licensed main facility for which the applied-for facility will be auxiliary. Also specify the file number of the license. See 47 C.F.R. Section 73.1675. (File No.: N/A)

18. Terrain and coverage data *(to be calculated in accordance with 47 C.F.R. Section 73.3121)*.

Source of terrain data: *(check only one box below)*

☐ Linearly interpolated 30-second database

☐ 7.5 minute topographic map



20. Is the proposed antenna location within 320 kilometers of the common border between the United States and Canada?

☐ Yes ☒ No

If Yes, attach as an Exhibit a showing of compliance with all provisions of the Working Agreement for Allocation of FM Broadcasting Stations on Channels 201-300 under The Canada-United States FM Agreement of 1947.

Exhibit No.  
N/A

21. If the proposed operation is for a channel in the range from channel 201 through 220 (88.1 through 91.9 MHz), or if this proposed operation is for a class D station in the range from Channel 221 through 300 (92.1 through 107.9 MHz), attach as an Exhibit a complete allocation study to establish the lack of prohibited overlap of contours with other U.S. stations. The allocation study should include the following:

Exhibit No.  
VB-6

See Engineering Statement - Table I, Table III

- (a) The normally protected interference-free and the interfering contours for the proposed operation along all azimuths.
- (b) Complete normally protected interference-free contours of all other proposals and existing stations to which objectionable interference would be caused.
- (c) Interfering contours over pertinent arcs of all other proposals and existing stations from which objectionable interference would be received.
- (d) Normally protected and interfering contours over pertinent arcs, of all other proposals and existing stations, which require study to show the absence of objectionable interference.
- (e) Plot of the transmitter location of each station or proposal requiring investigation, with identifying call letters, file numbers and operating or proposed facilities.
- (f) When necessary to show more detail, an additional allocation study will be attached utilizing a map with a larger scale to clearly show interference or absence thereof.
- (g) A scale of kilometers and properly labeled longitude and latitude lines, shown across the entire Exhibit(s). Sufficient lines should be shown so that the location of the sites may be verified.
- (h) The name of the map(s) used in the Exhibit(s).

22. With regard to any stations separated by 53 or 54 channels (10.6 or 10.8 MHz) attach as an Exhibit information required in 1/ *(separation requirements involving intermediate frequency (i.f.) interference)*.

Exhibit No.  
N/A

23.(a) Is the proposed operation on Channel 218, 219, or 220?

☐ Yes ☒ No

(b) If the answer to (a) is yes, does the proposed operation satisfy the requirements of 47 C.F.R. Section 73.207?

☐ Yes ☐ No

(c) If the answer to (b) is yes, attach as an Exhibit information required in 1/ regarding separation requirements with respect to stations on Channels 221, 222 and 223.

Exhibit No.  
N/A

(d) If the answer to (b) is no, attach as an Exhibit a statement describing the short spacing(s) and how it or they arose.

Exhibit No.  
N/A

1/ A showing that the proposed operation meets the minimum distance separation requirements. Include existing stations, proposed stations, and cities which appear in the Table of Allotments; the location and geographic coordinates of each antenna, proposed antenna or reference point, as appropriate; and distance to each from proposed antenna location.

CORRECTED

- (e) If authorization pursuant to 47 C.F.R. Section 73.215 is requested, attach as an Exhibit a complete engineering study to establish the lack of prohibited overlap of contours involving affected stations. The engineering study must include the following:

Exhibit No.  
N/A

- (1) Protected and interfering contours, in all directions (360°), for the proposed operation.
- (2) Protected and interfering contours, over pertinent arcs, of all short-spaced assignments, applications and allotments, including a plot showing each transmitter location, with identifying call letters or file numbers, and indication of whether facility is operating or proposed. For vacant allotments, use the reference coordinates as transmitter location.
- (3) When necessary to show more detail, an additional allocation study utilizing a map with a larger scale to clearly show prohibited overlap will not occur.
- (4) A scale of kilometers and properly labeled longitude and latitude lines, shown across the entire exhibit(s). Sufficient lines should be shown so that the location of the sites may be verified.
- (5) The official title(s) of the map(s) used in the exhibit(s).

24. Is the proposed station for a channel in the range from Channel 201 to 220 (88.1 through 91.9 MHz) and the proposed antenna location within the distance to an affected TV Channel 6 station(s) as defined in 47 C.F.R. Section 73.525?

☒ Yes ☐ No

If Yes, attach as an Exhibit either a TV Channel 6 agreement letter dated and signed by both parties or a map and an engineering statement with calculations demonstrating compliance with 47 C.F.R. Section 73.525 for each affected TV Channel 6 station.

Exhibit No.  
VB-9

25. Is the proposed station for a channel in the range from Channel 221 to 300 (92.1-107.9 MHz)?

☐ Yes ☒ No

If Yes, attach as an Exhibit information required in 17. (Except for Class B (secondary) proposals.)

Exhibit No.  
N/A

26. Environmental Statement (See 47 C.F.R. Section 1.1301 et seq.)

Would a Commission grant of this application come within Section 1.1307 of the FCC Rules, such that it may have a significant environmental impact?

☐ Yes ☒ No

If you answer Yes, submit as an Exhibit an Environmental Assessment required by Section 1.1311.

Exhibit No.  
N/A

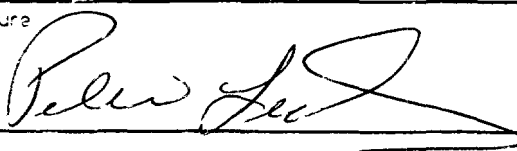
If No, explain briefly why not.

The proposed site is categorically excluded from environmental processing under the provisions of Section 1.1306 of the FCC Rules and Regulations.

SEE Exhibit VB-8.

## CERTIFICATION

I certify that I have prepared this Section of this application on behalf of the applicant, and that after such preparation, I have examined the foregoing and found it to be accurate and true to the best of my knowledge and belief.

Name (Typed or Printed)	Relationship to Applicant (e.g., Consulting Engineer)
Peter W. Lechman	Telecommunications Consultant
Signature	Address (Include ZIP Code)
	LECHMAN & JOHNSON, INC. 16201 TRADE ZONE AVENUE, SUITE 106 UPPER MARLBORO, MARYLAND 20772
Date	Telephone No. (Include Area Code)
April 2, 1993	(301) 390-0900

**ENGINEERING AMENDMENT**

**BEACON BROADCASTING CORPORATION  
APPLICATION BPED-900905ML FOR A NEW NCE-FM STATION  
ALLENTOWN, PENNSYLVANIA**

**CHANNEL 207A 0.125 KW-V (MAX-DA) 245 M**

**BEACON BROADCASTING CORPORATION  
APPLICATION BPED-900905ML FOR A NEW NCE-FM STATION  
ALLENTOWN, PENNSYLVANIA**

This Engineering Statement is being submitted on behalf of Beacon Broadcasting Company, to respond to the Commission Hearing Designation Order ("HDO"), adopted February 5, 1993, released March 9, 1993, alleging deficiencies that require correction and or additional information to clarify technical questions.


The HDO states that Beacon's height above ground level and overall height above mean level of its proposed tower is incorrect according to their records. The Commission is incorrect with their assessment of their own data on file. Beacon proposes to co-locate on the tower with the facilities of WFMZ-TV and WFMZ(FM). Appendix A, attached, is a copy of WFMZ(FM)'s Construction Permit (BMPH-921113IB) showing that Beacon's coordinates, height above ground, and overall height above mean level of the proposed tower is correct. Appendix B attached is a copy of WFMZ(FM)'s application with appropriate tower sketch document in support of WFMZ's CP.

Paragraph 17 of the HDO alleges Beacon failed to address the matter of how they propose to resolve any RF exposure to workers on their respective towers. For clarification, Maranatha Broadcasting Company, Inc., owners and or leasee of the tower, will replace the existing tower with a taller tower. The existing tower will be dismantled after construction of the new tower. Exhibit VB-8 of Beacon's amendment application, addressed the question of RF exposure to workers. As stated in Exhibit VB-8, last paragraph:

Engineering Amendment  
Beacon Broadcasting Corporation  
Allentown, Pennsylvania  
April 2, 1993  
Page Two

be  $\frac{1}{2}$  inch in diameter and located adjacent to transmission lines with sizes ranging from  $\frac{1}{2}$  inch to 6 inches, with the placement of Beacon's proposed transmission line grouped with the larger size transmission lines. Beacon's proposed transmission line will have no effect upon the translators directional antenna pattern. Specifically, these translators' antennas are highly directional with minimum radiation emitted toward the tower structure and or transmission lines located within the tower structure. Beacon will take precautions to assure that its proposed transmission line is grouped with the larger diameter size transmission lines that are used for other FM and TV stations co-located.

LECHMAN & JOHNSON, INC.



Peter W. Lechman  
Telecommunications Consultant  
April 2, 1993

LECHMAN & JOHNSON, INC.

CORRECTED

EXHIBIT VB-7

Page 2

DIRECTIONAL ANTENNA INFORMATION

BEACON BROADCASTING CORPORATION  
AMENDMENT TO APPLICATION FOR CONSTRUCTION PERMIT (BPED-900905ML)  
NON-COMMERCIAL FM RADIO STATION  
ALLENTOWN, PENNSYLVANIA

Channel 207A

0.125 kW (Max) DA

245 Meters

<u>Azimuth</u>	<u>Rel.Fld.</u>	<u>dB</u>	<u>dBk</u>	<u>kW</u>
0	0.357	-8.95	-17.98	0.01590
10	0.449	-6.95	-15.98	0.02520
20	0.566	-4.95	-13.98	0.04000
30	0.712	-2.95	-11.98	0.06340
40	0.896	-0.95	-9.98	0.10000
45	0.995	-0.04	-9.07	0.12400
50	1.000	0.00	-9.03	0.12500
60	1.000	0.00	-9.03	0.12500
70	1.000	0.00	-9.03	0.12500
80	1.000	0.00	-9.03	0.12500
90	0.941	-0.53	-9.56	0.11100
100	0.826	-1.66	-10.69	0.08500
110	0.697	-3.14	-12.17	0.06100
120	0.598	-4.47	-13.50	0.04500
130	0.528	-5.55	-14.58	0.03500
135	0.481	-6.35	-15.38	0.29000
140	0.448	-6.97	-16.00	0.02500
150	0.448	-6.97	-16.00	0.02500
160	0.490	-6.19	-15.22	0.03000
170	0.551	-5.17	-14.20	0.03800
180	0.633	-3.97	-13.00	0.05000
190	0.689	-3.24	-12.27	0.05930
200	0.693	-3.19	-12.22	0.06000
210	0.693	-3.19	-12.22	0.06000
220	0.633	-3.97	-13.00	0.05010
225	0.566	-4.95	-13.98	0.04000
230	0.515	-5.75	-14.78	0.03330
240	0.410	-7.75	-16.78	0.02100
250	0.325	-9.75	-18.78	0.01320
260	0.259	-11.75	-20.78	0.00836
270	0.205	-13.75	-22.78	0.00527
280	0.197	-14.13	-23.16	0.00482
290	0.190	-14.43	-23.46	0.00451

LECHMAN & JOHNSON, INC.

CORRECTED

EXHIBIT VB-7

Page 3

DIRECTIONAL ANTENNA INFORMATION

BEACON BROADCASTING CORPORATION  
AMENDMENT TO APPLICATION FOR CONSTRUCTION PERMIT (BPED-900905ML)  
NON-COMMERCIAL FM RADIO STATION  
ALLENTOWN, PENNSYLVANIA

Channel 207A      0.125 kW (Max) DA      245 Meters

<u>Azimuth</u>	<u>Rel.Fld.</u>	<u>dB</u>	<u>dBk</u>	<u>kW</u>
300	0.183	-14.75	-23.78	0.00420
310	0.179	-14.95	-23.98	0.00400
315	0.179	-14.95	-23.98	0.00400
320	0.179	-14.95	-23.98	0.00400
330	0.179	-14.95	-23.98	0.00400
340	0.225	-12.95	-21.98	0.00634
350	0.283	-10.95	-19.98	0.01000

LECHMAN & JOHNSON, INC.

COMPLIED WITH PARAGRAPH 17, HDO

EXHIBIT VB-8

RADIOFREQUENCY RADIATION STUDY

BEACON BROADCASTING CORPORATION  
AMENDMENT TO APPLICATION FOR CONSTRUCTION PERMIT (BPED-900905ML)  
NON-COMMERCIAL FM RADIO STATION  
ALLENTOWN, PENNSYLVANIA

Channel 207A

0.125 kW (V)

245 Meters

The following calculations are performed in order to determine, whether the proposed FM station has a significant environmental effect. The calculations to determine power densities ( $\text{mW}/\text{cm}^2$ ) and power density levels of all TV and FM facilities are computed by using the following equation:

$$\text{Power density in } \text{mW}/\text{cm}^2 \text{ (S)} = \frac{(33.4)(F^2)[(.4)(\text{Visual ERP}) + \text{Aural ERP}]}{(\text{Distance from Center of Radiation})^2}$$

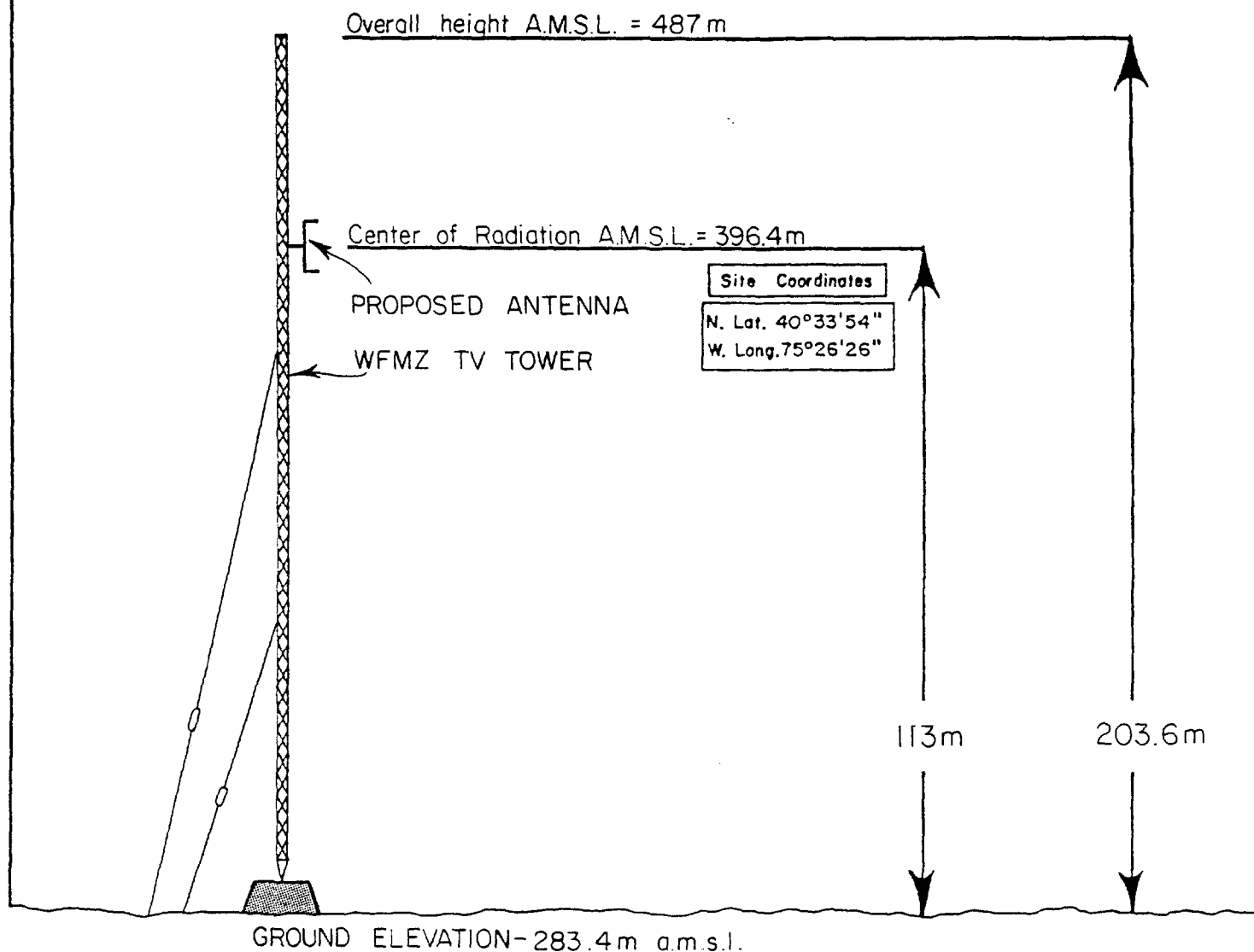
In the above equation, ERP is the total power of horizontal and vertical polarization in kilowatts, distance to a location is in meters and F is the relative field strength towards the location from the vertical plane pattern. For the proposed FM facility, the total ERP is 0.125 kW and the center of radiation is 113 meters above ground. At a depression angle of 90 degrees F is assumed to be 1.0, that is the "worst case" assumption. Therefore, maximum power density for the proposed FM facility at the base of the tower is  $0.000333 \text{ mW}/\text{cm}^2$  or 0.03 percent of the FM permitted maximum. For television station WFMZ-TV "worst case" power density near the tower base, F is 1.0 and aural power is 22 percent of visual. Therefore worst case WVTM-TV power density is  $0.92 \text{ mW}/\text{cm}^2$ . This 34.3 percent of the maximum permitted for operation on channel 69 ( $2.68 \text{ mW}/\text{cm}^2$ ). In the case of station WFMZ(FM) the calculated power density for "worst case",  $F = 1$ , is  $0.065 \text{ mW}/\text{cm}^2$  or 6.5 percent of the FM maximum.

Therefore, the total calculated "worst case" power density at the base of the tower is less than 41 percent of the permitted maximum. Thus, the proposal is in compliance with OST Bulletin No. 65 and the ANSI Standards.

To assure that personnel working on the tower is not excessively exposed, the applicant will reduce power or turn the transmitter off, as necessary, to make sure that such persons will not be exposed to excessive levels of Radiofrequency Radiation.



MARCH 1993



CORRECTED

EXHIBIT VB-1

BEACON BROADCASTING CORPORATION  
AMENDMENT TO APPLICATION FOR CONSTRUCTION PERMIT (BPED-900905ML)  
NON-COMMERCIAL FM RADIO STATION  
ALLENTOWN, PENNSYLVANIA

Channel 207A

0.125 kW (V)

245 Meters

LECHMAN & JOHNSON, INC.  
TELECOMMUNICATIONS CONSULTANTS  
16901 TRADEZONE AVENUE SUITE 106  
UPPER MERIDEN, MD 20778  
(301) 390-0800

## **APPENDIX B**

FCC 301

FEDERAL COMMUNICATIONS COMMISSION  
WASHINGTON, D.C. 20544FOR  
FCC  
USE  
ONLYAPPLICATION FOR CONSTRUCTION PERMIT  
FOR COMMERCIAL BROADCAST STATION

FOR COMMISSION USE ONLY

FILE NO.

## Section I - GENERAL INFORMATION

## 1. APPLICANT NAME

Maranatha Broadcasting Company, Inc.

MAILING ADDRESS (Line 1) (Maximum 35 characters)

EastRock Road

MAILING ADDRESS (Line 2) (If required) (Maximum 35 characters)

CITY

Allentown

STATE OR COUNTRY (If foreign address)

PA

ZIP CODE

18103

TELEPHONE NUMBER (Include area code)

(215) 797-4530

CALL LETTERS

WFMZ(FM)

OTHER FCC IDENTIFIER (IF APPLICABLE)

BPH-8703311L

FOR MAILING THIS APPLICATION, SEE INSTRUCTIONS FOR SECTION 1 - GENERAL INFORMATION B.

2. A. Is a fee submitted with this application?

☒ Yes ☐ No

B. If No, indicate reason for fee exemption (see 47 C.F.R. Section 1.1112) and go to Question 3.

☐ Governmental Entity☐ Noncommercial educational licensee

C. If Yes, provide the following information:

Enter in Column (A) the correct Fee Type Code for the service you are applying for. Fee Type Codes may be found in the "Mass Media Services Fee Filing Guide." Column (B) lists the Fee Multiple applicable for this application. Enter in Column (C) the result obtained from multiplying the value of the Fee Type Code in Column (A) by the number listed in Column (B).

(A)	(B)	(C)	FOR FCC USE ONLY
FEE TYPE CODE	FEE MULTIPLE (If required)	FEE DUE FOR FEE TYPE CODE IN COLUMN (A)	
(1) M P R	0 0 0 1	\$ 565.00	

To be used only when you are requesting concurrent actions which result in a requirement to list more than one Fee Type Code.

(A)	(B)	(C)	FOR FCC USE ONLY
(2)	0 0 0 1	\$	

ADD ALL AMOUNTS SHOWN IN COLUMN C, LINES (1) THROUGH (2), AND ENTER THE TOTAL HERE. THIS AMOUNT SHOULD EQUAL YOUR ENCLOSED REMITTANCE.

TOTAL AMOUNT REMITTED  
WITH THIS APPLICATION

\$ 565.00

FOR FCC USE ONLY

3. This application is for: (check one box)

☐ AM☒ FM☐ TV

(b) Channel No. or Frequency

26.4

(b) Principal  
Community

City

Allentown

State

PA

Section I - GENERAL INFORMATION (Page 2)

(c) Check one of the following boxes:

- ☐ Application for NEW station
- ☐ MAJOR change in licensed facilities; call sign: \_\_\_\_\_
- ☐ MINOR change in licensed facilities; call sign: \_\_\_\_\_
- ☐ MAJOR modification of construction permit; call sign: \_\_\_\_\_
- File No. of construction permit: \_\_\_\_\_
- ☒ MINOR modification of construction permit; call sign: \_\_\_\_\_ **WFMZ (RM)**
- File No. of construction permit: \_\_\_\_\_ **BPH-8703311L**
- ☐ AMENDMENT to pending application; Application file number: \_\_\_\_\_

NOTE: It is not necessary to use this form to amend a previously filed application. Should you do so, however, please submit only Section I and those other portions of the form that contain the amended information.

4. Is this application mutually exclusive with a renewal application? ☐ Yes ☒ No

If Yes, state:

Call letters	Community of License	
	City	State

Section V-B - FM BROADCAST ENGINEERING DATA

FOR COMMISSION USE ONLY

File No. \_\_\_\_\_

ASB Referral Date \_\_\_\_\_

Referred by \_\_\_\_\_

Name of Applicant

Maranatha Broadcasting Company, Inc.

Call letters (if issued)

WFMZ (FM)

Is this application being filed in response to a window? ☐ Yes ☒ No

If Yes, specify closing date: \_\_\_\_\_

Purpose of Application: (check appropriate box(es))

☐ Construct a new (main) facility

☐ Construct a new auxiliary facility

☒ Modify existing construction permit for main facility

☐ Modify existing construction permit for auxiliary facility

☐ Modify licensed main facility

☐ Modify licensed auxiliary facility

If purpose is to modify, indicate below the nature of change(s) and specify the file number(s) of the authorizations affected.

☐ Antenna supporting-structure height

☒ Effective radiated power

☒ Antenna height above average terrain

☐ Frequency

☐ Antenna location

☐ Class

☐ Main Studio location

☐ Other (Summarize briefly)

File Number(s) BPH-8703311 L  
BMPH-920316J1

1. Allocation:

Channel No.	Principal community to be served:		
	City	County	State
264	Allentown	Lehigh	PA

Class (check only one box below)

☐ A ☐ B1 ☒ B ☐ C3  
☐ C2 ☐ C1 ☐ C

2. Exact location of antenna.

(a) Specify address, city, county and state. If no address, specify distance and bearing relative to the nearest town or landmark.

East Rock Road

(b) Geographical coordinates (to nearest second). If mounted on element of an AM array, specify coordinates of center of array. Otherwise, specify tower location. Specify South Latitude or East Longitude where applicable; otherwise, North Latitude or West Longitude will be presumed.

Latitude	40	°	33	'	54	"	Longitude	75	°	26	'	26	"
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3. Is the supporting structure the same as that of another station(s) or proposed in another pending application(s)? ☐ Yes ☒ No

If Yes, give call letter(s) or file number(s) or both. \_\_\_\_\_

If proposal involves a change in height of an existing structure, specify existing height above ground level including antenna, all other appurtenances, and lighting, if any. \_\_\_\_\_

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4. Does the application propose to correct previous site coordinates?  
If Yes, list old coordinates.

☐ Yes ☒ No

Latitude	Longitude
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5. Has the FAA been notified of the proposed construction?

☐ Yes ☒ No

If Yes, give date and office where notice was filed and attach as an Exhibit a copy of FAA determination, if available.

Exhibit No.

Date \_\_\_\_\_ Office where filed \_\_\_\_\_

6. List all landing areas within 8 km of antenna site. Specify distance and bearing from structure to nearest point of the nearest runway.

	Landing Area	Distance (km)	Bearing (degrees True)
(a)	Queen City	4.3	270
(b)			

7. (a) Elevation: (to the nearest meter)

(1) of site above mean sea level; 283.5 meters

(2) of the top of supporting structure above ground (including antenna, all other appurtenances, and lighting, if any); and 203.6 meters

(3) of the top of supporting structure above mean sea level [(aX1) + (aX2)] 487.1 meters

- (b) Height of radiation center: (to the nearest meter) H = Horizontal; V = Vertical

(1) above ground 195.5 meters (H)

195.5 meters (V)

(2) above mean sea level [(aX1) + (bX1)] 479.0 meters (H)

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10. Is a directional antenna proposed?

☐ Yes ☒ No

If Yes, attach as an Exhibit a statement with all data specified in 47 C.F.R. Section 73.316, including plot(s) and tabulations of the relative field.

Exhibit No.

11. Will the proposed facility satisfy the requirements of 47 C.F.R. Sections 73.315(a) and (b)?

☒ Yes ☐ No

If No, attach as an Exhibit a request for waiver and justification therefor, including amounts and percentages of population and area that will not receive 3.16 mV/m service.

Exhibit No.

12. Will the main studio be within the protected 3.16 mV/m field strength contour of this proposal?

☒ Yes ☐ No

If No, attach as an Exhibit justification pursuant to 47 C.F.R. Section 73.1125.

Exhibit No.

13. (a) Does the proposed facility satisfy the requirements of 47 C.F.R. Section 73.207?

☐ Yes ☒ No

(b) If the answer to (a) is No, does 47 C.F.R. Section 73.213 apply?

☐ Yes ☒ No

(c) If the answer to (b) is Yes, attach as an Exhibit a justification, including a summary of previous waivers.

Exhibit No.

(d) If the answer to (a) is No and the answer to (b) is No, attach as an Exhibit a statement describing the short spacing(s) and how it or they arose.

Exhibit No.  
EE-1

(e) If authorization pursuant to 47 C.F.R. Section 73.215 is requested, attach as an Exhibit a complete engineering study to establish the lack of prohibited overlap of contours involving affected stations. The engineering study must include the following:

Exhibit No.  
DNA

- (1) Protected and interfering contours, in all directions (360), for the proposed operation.
- (2) Protected and interfering contours, over pertinent arcs, of all short-spaced assignments, applications and allotments, including a plot showing each transmitter location, with identifying call letters or file numbers, and indication of whether facility is operating or proposed. For vacant allotments, use the reference coordinates as the transmitter location.
- (3) When necessary to show more detail, an additional allocation study utilizing a map with a larger scale to clearly show prohibited overlap will not occur.
- (4) A scale of kilometers and properly labeled longitude and latitude lines, shown across the entire exhibit(s). Sufficient lines should be shown so that the location of the sites may be verified.
- (5) The official title(s) of the map(s) used in the exhibit(s).

14. Are there: (a) within 60 meters of the proposed antenna, any proposed or authorized FM or TV transmitters, or any nonbroadcast *except citizens band or amateur* radio stations; or (b) within the blanketing contour, any established commercial or government receiving stations, cable head-end facilities, or populated areas; or (c) within ten (10) kilometers of the proposed antenna, any proposed or authorized FM or TV transmitters which may produce receiver-induced intermodulation interference?

☒ Yes ☐ No

If Yes, attach as an Exhibit a description of any expected, undesired effects of operations and remedial steps to be pursued if necessary, and a statement accepting full responsibility for the elimination of any objectionable interference (including that caused by receiver-induced or other types of modulation) to facilities in existence or authorized or to radio receivers in use prior to grant of this application. (See 47 C.F.R. Sections 73.315(b), 73.316(a) and 73.318.)

Exhibit No.  
EE-1

15. Attach as an Exhibit a 7.5 minute series U.S. Geological Survey topographic quadrangle map that shows clearly, legibly, and accurately, the location of the proposed transmitting antenna. This map must comply with the requirements set forth in Instruction V (D). The map must further clearly and legibly display the original printed contour lines and data as well as latitude and longitude markings and must bear a scale of distance in kilometers.

Exhibit No.  
ON FILE

16. Attach as an Exhibit *(name the source)* a map which shows clearly, legibly, and accurately, and with the original printed latitude and longitude markings and a scale of distance in kilometers:

Exhibit No.  
EE1 Fig 3A

(a) the proposed transmitter location, and the radials along which profile graphs have been prepared;

(b) the 3.16 mV/m and 1 mV/m predicted contours; and

(c) the legal boundaries of the principal community to be served.

17. Specify area in square kilometers (1 sq. mi. = 2.59 sq. km.) and population (latest census) within the predicted 1 mV/m contour.

Area 8717.5 sq. km.

Population 1,649,547

18. For an application involving an auxiliary facility only, attach as an Exhibit a map *(Sectional Aeronautical Chart or equivalent)* that shows clearly, legibly, and accurately, and with latitude and longitude markings and a scale of distance in kilometers:

Exhibit No.  
DNA

(a) the proposed auxiliary 1 mV/m contour; and

(b) the 1 mV/m contour of the licensed main facility for which the applied-for facility will be auxiliary. Also specify the file number of the license.

19. Terrain and coverage data *(to be calculated in accordance with 47 C.F.R. Section 73.313)*

Source of terrain data: *(check only one box below)*

☒ Linearly interpolated 30-second database

☐ 7.5 minute topographic map

(Source: NGDC 30 sec.)

☐ Other *(briefly summarize)*



Radial bearing (degrees True)	Height of radiation center above average elevation of radial from 3 to 16 km (meters)	Predicted Distances	
		To the 316 mV/m contour (kilometers)	To the 1 mV/m contour (kilometers)
0	355.6	34.8	54.5
45	355.9	34.8	54.5
90	332.7	33.6	53.0
135	313.6	32.6	51.8
180	283.3	31.2	49.7
225	262.4	30.3	48.2
270	353.2	34.7	54.4
315	359.2	35.0	55.7

\*Radial through principal community, if not one of the major radials. This radial should NOT be included in the calculation of HAAT.

20. Environmental Statement (See 47 C.F.R. Section 1.1301 et seq.)

Would a Commission grant of this application come within Section 11307 of the FCC Rules, such that it may have a significant environmental impact? ☐ Yes ☒ No

If you answer Yes, submit as an Exhibit an Environmental Assessment required by Section 11311.

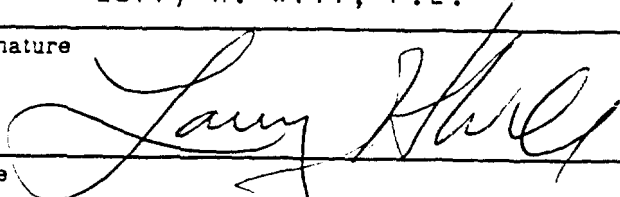
Exhibit No.

If No, explain briefly why not.

See Exhibit EE-1

CERTIFICATION

I certify that I have prepared this Section of this application on behalf of the applicant, and that after such preparation, I have examined the foregoing and found it to be accurate and true to the best of my knowledge and belief.

Name (Typed or Printed) Larry H. Will, P.E.	Relationship to Applicant (e.g., Consulting Engineer) Consulting Engineer
Signature 	Address (Include ZIP Code) 180 Franklin Corners Rd, F8 Trenton, NJ 08648
Date November 11, 1992	Telephone No. (Include Area Code) (609 ) 530-5069